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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,928	04/14/2004	Derek Humphries	ACOP.36235	5291

116 7590 09/12/2005

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EXAMINER

MAYO, TARA L

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,928

Applicant(s)

HUMPHRIES ET AL.

Examiner

Tara L. Mayo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5,7-14 and 17-24 is/are rejected.
- 7) ☒ Claim(s) 4,6,15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION
Specification

1. The prior objection to the Abstract has been overcome by the response filed 06 June 2005.
2. The disclosure is objected to because of the following informalities: undefined abbreviations. On page 15 at line 12, define "DIN 19580." Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The prior rejection of claims 7 and 9 have been overcome by the response filed 06 June 2005.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2, 3, 5, 7 through 14 and 17 through 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton et al. (U.S. Patent No. 6,767,456 B2) in view of Thomann et al. (U.S. Patent No. 4,553,874).

Middleton et al. '456, as seen in Figure 1a, show a reinforced drainage grate assembly (10) comprising:

with regard to claims 3, 13 and 20,

a drainage grate (34) having a substantially planar drainage surface including a plurality of apertures therethrough and a pair of side portions (40) extending orthogonally below said surface; and

a reinforcing member (32) disposed between the side portions and the underside of said drainage surface so that an upper surface of said reinforcing member abuts said underside of said drainage surface, said reinforcing member including a plurality of apertures therethrough, wherein at least a portion of said apertures are co-registered with at least a portion of said apertures in said drainage surface so as to permit the passage of fluids from said drainage surface through said reinforcing member, and wherein said upper surface includes at least one substantially continuous upper surface portion disposed inwardly of the said portions of said grate and said underside of said grate and extending from a first end of said reinforcing member

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to a second end of said reinforcing member, wherein said reinforcing member further comprises a plurality of slots disposed therein, said slots adapted to receive a metal strip therein;

with regard to claims 2 and 17,

wherein a plurality of said apertures of said reinforcing member are of substantially the same dimensions as, and co-registered with, a corresponding plurality of said apertures in said drainage surface;

with regard to claims 5 and 18,

wherein said slots extend perpendicular to said pair of side portions;

with regard to claims 7 and 19,

wherein the dimensions of the grate correspond to the dimensions of the reinforcing member;

with regard to claims 8, 9, 21 and 22,

the reinforcing member being formed of a single piece of material;

with regard to claim 10,

wherein the area of said upper surface of said reinforcing member is greater than the area of said apertures in said reinforcing member;

with regard to claim 11,

wherein said reinforcing member includes a plurality of apertures disposed orthogonally between said side portions of said drainage grate

with regard to claim 12,

wherein said reinforcing member includes a plurality of apertures disposed in a line substantially perpendicularly between said side portions of said drainage grate; and

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with regard to claims 23 and 24,

wherein said reinforcing member includes at least one elongate fastening member (40) extending orthogonally from a bottom surface thereof, said fastening member including an enlarged distal end portion (as seen in Figure 1a).

Middleton et al. '456 fail to teach:

the drainage grate being elongate;

the side portions of the grate extending longitudinally;

the side portions including a bottom flange extending toward the opposing one of side portions;

the upper surface of the reinforcing member being longitudinal;

the drainage grate being rectangular;

the reinforcing member being formed from plastic; and

the reinforcing member having a Class A rating.

Thomann et al. '874, as seen in Figures 4 and 6, show a drainage grate comprising a planar surface, orthogonally extending side portions and including a bottom flange extending toward the opposing one of said side portions.

With regard to claims 3 and 13, it would have been obvious to one having ordinary skill in the art of drainage at the time the invention was made to modify the device shown by Middleton et al. '456 such that it would include a flange as taught by Thomann et al. '874 to

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provide the assembly with a shoulder for retaining the reinforcing member against the underside of the drainage grate.

With regard to claims 3, 7, 13 and 19, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device shown by the combination of Middleton et al. '456 and Thomann et al. '874 such that the drainage grate and/or reinforcing member would be elongate or rectangular. The motivation would have been to cover a similarly shaped elongate or rectangular shaped drain opening. Furthermore, it has been held that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

With regard to claim claims 8, 9, 21 and 22, it would have been obvious to one having ordinary skill in the art of drainage at the time the invention was made to make the reinforcing member of the device shown by the combination of Middleton et al. '456 and Thomann et al. '874 of plastic because of its non-corrosive properties.

With regard to claim 14, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the grate of the assembly shown by the combination of Middleton et al. '456 and Thomann et al. '874 such that it would have a Class A rating. The motivation would have been to design the grate such that it would be capable of withstanding a desired load.

Allowable Subject Matter

7. Claims 4, 6, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 571-272-6992. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to be 'J. Kim'.

06 September 2005

A handwritten signature in black ink, appearing to be 'Thomas B. Will'.

Thomas B. Will
Supervisory Patent Examiner
Group 3600